

We have the **FACTS**, but  
.... what is the story?

Hans Nilsson  
(through Lars J Nilsson)

# Commentary: The untapped potential of energy efficiency



By Noé van Hulst

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*The safest and the cleanest power plant is the one you don't have to build thanks to higher energy efficiency*

*(Photograph: Getty Images)*

Source: <http://www.iea.org/newsroom/news/2017/may/commentary-the-untapped-potential-of-energy-efficiency-.html>

# IEA Market Reports



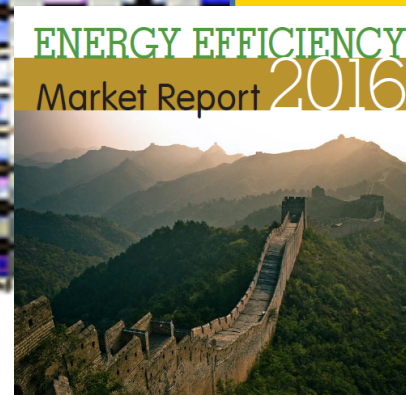
**Efficiency is the FIRST fuel**



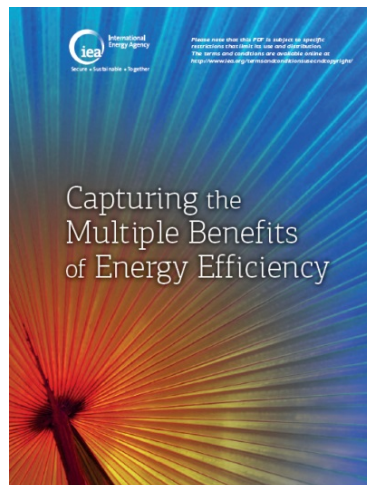
**Efficiency is an invisible powerhouse**



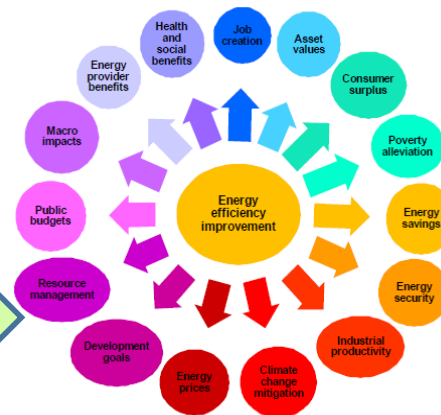
**Efficiency is a hidden jewel**



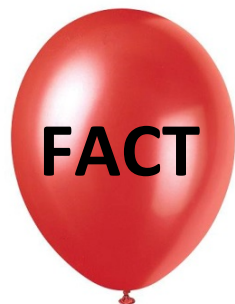
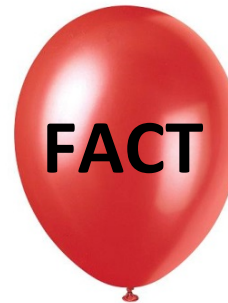
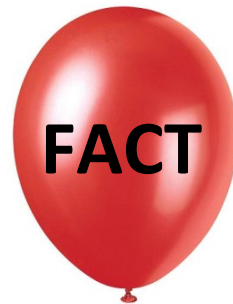
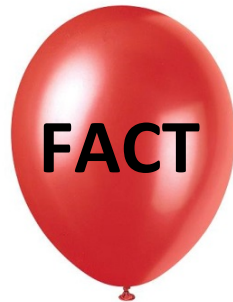
**Efficiency is the one resource all possess in abundance**



**Efficiency has multiple benefits**



# Facts!



# Facts!



- My **FACTS** fly up, my thoughts remain below.
- **FACTS** without thoughts never to heaven go.

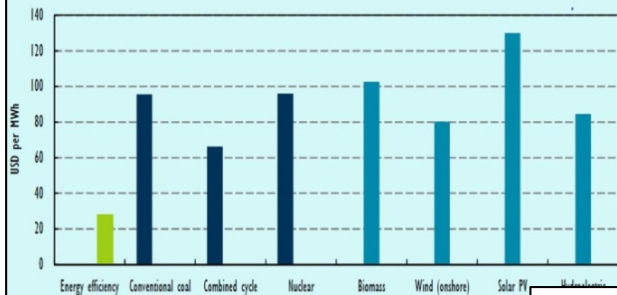
Source: King Claudius in Hamlet  
Act 3, Scen 3



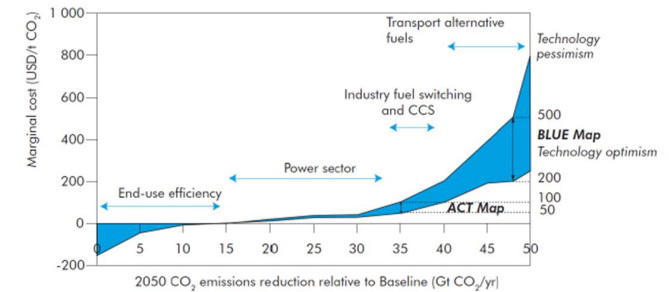
# Facts!

## Cheapest resource

Figure 4.12 Levelised cost comparison among energy supply sources in the United States



## Energy Efficiency – the cheap solution



Source: IEA Energy Technology Perspective 2009

## Does price drive the change?

Figure 10.4 Cost of conserved energy of the untapped global energy efficiency potential in the New Policies Scenario, 2030



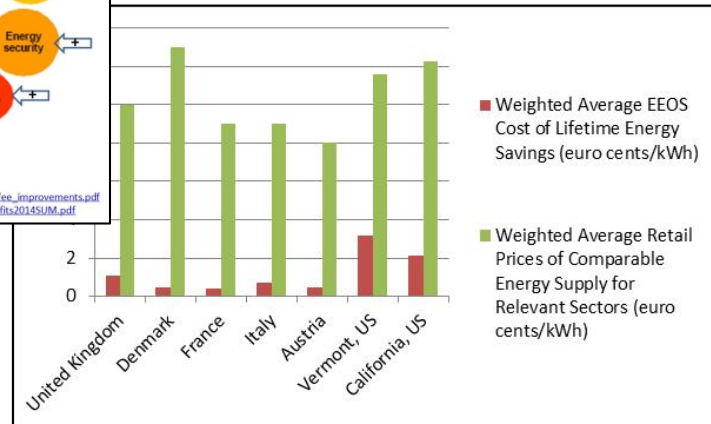
Notes: Dashed dark red lines indicate weighted average energy prices. The reduction in total final energy consumption is calculated for energy demand from new energy-consuming equipment purchased in 2030.

Source: IEA WEO 2015

## Multiple Benefits (Non Energy Benefits)

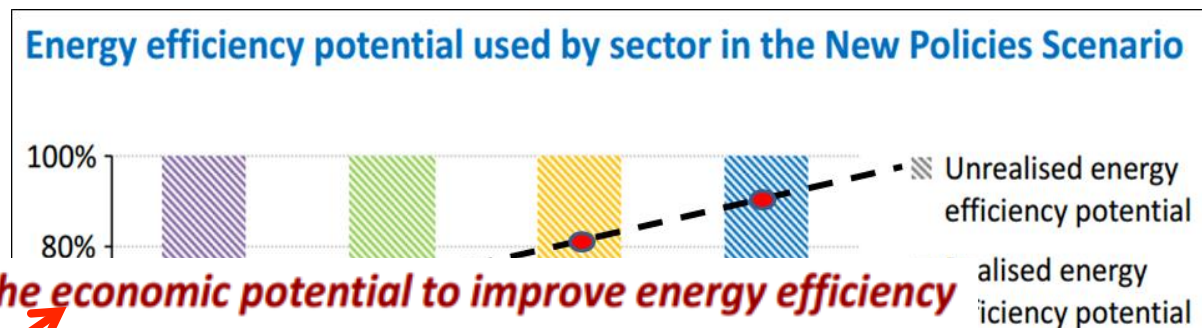


Sources: [http://www.iea.org/publications/insights/ee\\_improvements.pdf](http://www.iea.org/publications/insights/ee_improvements.pdf)  
<http://www.iea.org/Textbase/npsum/MultipleBenefits2014SUM.pdf>

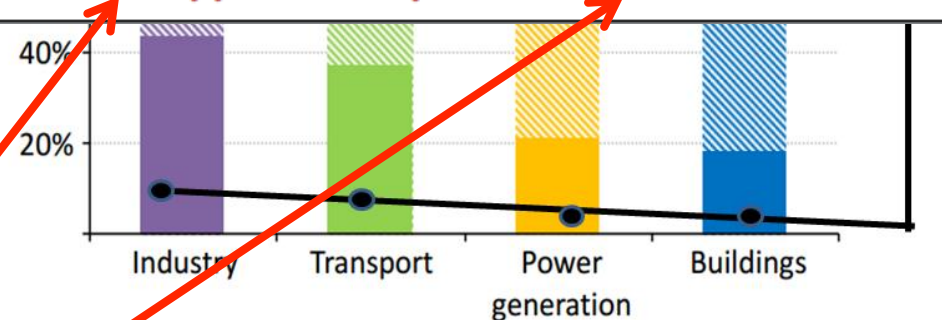


# RESULT!

?



*Two-thirds of the economic potential to improve energy efficiency remains untapped in the period to 2035*



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2/3

Economic

remains

17 years

# Facts speak for themselves !

## Or don't they ?

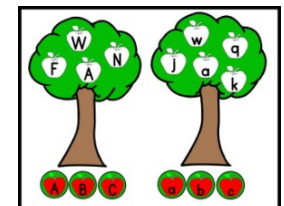




# Facts are raw material – to be processed

## The receivers steps towards a decision

1. **Understanding** facts
2. **Perception** of situation
3. **Ability** to act



1. *Thinking automatically*: People make most judgements and choices automatically, not deliberately.

Two  
systems  
of  
thinking



**Why facts  
(alone) are  
not enough!**

**IT IS IN YOUR BRAIN!**

**IT IS IN YOUR NEIGH-  
BOURHOOD!**

**Why facts  
(alone) are  
not enough!**

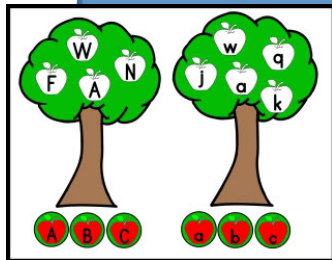
*2. Thinking socially:* How people act and think often depends on what others around them do and think.

**Behaviour**

**Beliefs and habits**



**Why facts  
(alone) are  
not enough!**

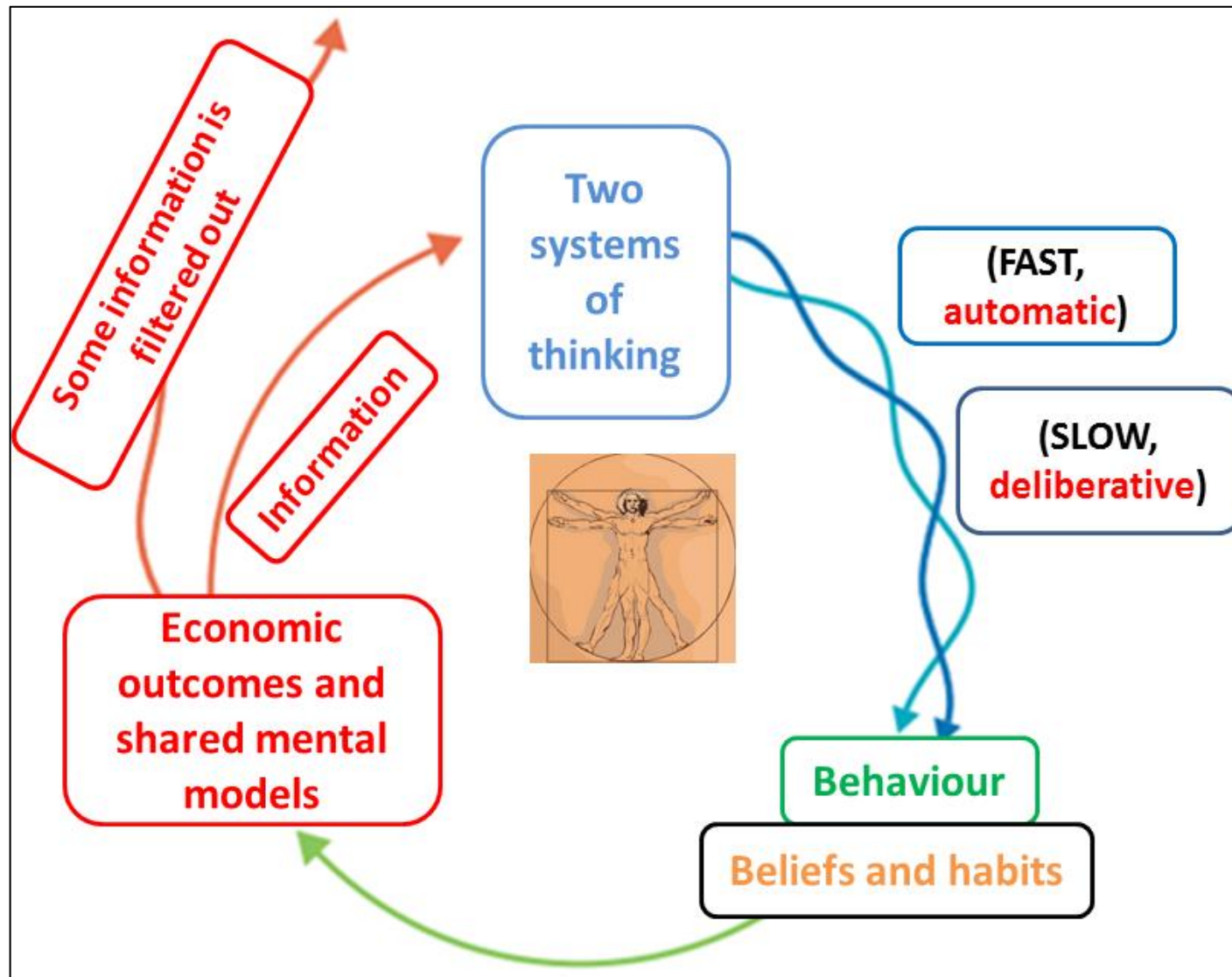


**Economic outcomes  
and shared mental  
models**

3. *Mental models*: Individuals in a given society share a common perspective on making sense of the world around them and understanding themselves. (Culture)

**IT IS (NOT) IN YOUR  
STORE!**

...and some get lost on the way





***George Lakoff:  
Progressives Need to Frame  
Their Values***

# Facts are elements. Values is the message

## Building (arguing) values

- (1) communicate the general value system,
- (2) repeat the truths that reveal what is right about those values,

## Values

- Freedom
- Independence
- Choices
- Competitiveness
- Robustness
- Security
- Sustainability
- Etc.

Source: George Lakoff: In Politics, Progressives Need to Frame Their Values  
<https://georgelakoff.com/2014/11/29/george-lakoff-in-politics-progressives-need-to-frame-their-values/>

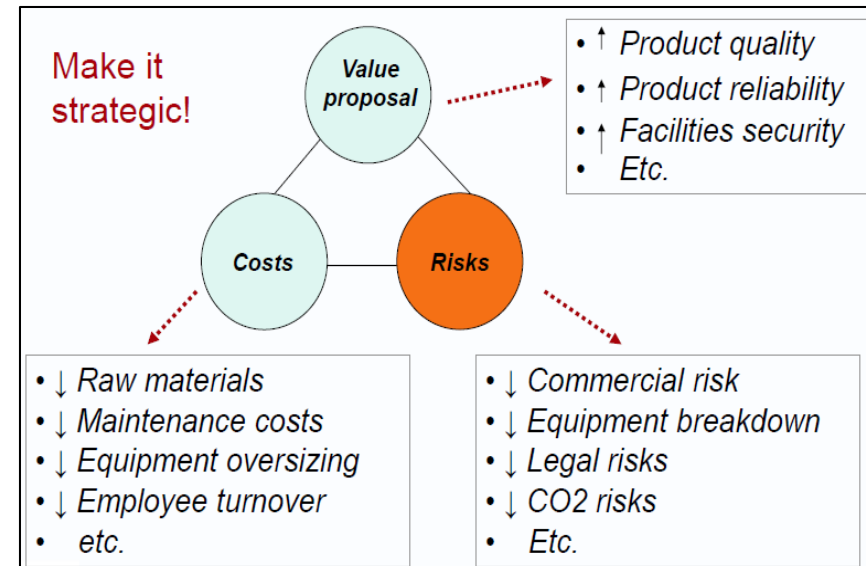
**Wed truths (facts) to values!**

# The Context(s)

		Supply	
		High density, (Low availability) <i>(e.g. fossil, nuclear)</i>	Low density, (High availability) <i>(e.g. solar, wind, bio)</i>
End-Use of Energy	High Efficiency (Low Intensity) <i>e.g. CFL and LED lighting; Adjustable speed drives</i>	UNECONOMICAL	SUSTAINABLE
	Low Efficiency (High Intensity) <i>e.g. Incandescent lamps, Direct electrical heating</i>	PRESENT SYSTEM	HARDLY FEASIBLE

**1. Sustainability and choice has/is a VALUE**

**2. The energy services provides security and choices which are VALUES**



# Tell a better story or Tell the story better!

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“But before we move on, allow me to belabor the point even further...”